

Master Econometrics Statistics

Double degree program 2024/2026

with University of Kent



















Dear candidate,

Aix-Marseille School of Economics promotes the idea of students acquiring international experience throughout their academic journey. This can be achieved through various avenues, including participating in a double degree program. The advantages of such international experiences are indisputable.

One of the key benefits is the opportunity to gain fresh perspectives. Experiencing education and life in a different country allows students to broaden their worldview, fostering a more comprehensive understanding of global issues and diverse cultural practices. This exposure to new ideas contributes significantly to personal and intellectual growth.

Moreover, engaging with a different academic culture can be intellectually enriching. Experiencing diverse teaching methods, research approaches, and academic environments can enhance a student's skill set and provide a well-rounded education. It encourages adaptability and flexibility, qualities that are increasingly valuable in our interconnected and rapidly changing world.

Beyond the academic realm, international experiences contribute to the expansion of personal and professional networks. Interacting with individuals from diverse backgrounds not only enhances cultural competence but also creates connections that can be valuable in both personal and professional spheres. Building a global network can open doors to future collaborations, career opportunities, and a deeper understanding of the interconnectedness of the academic and professional landscape.

In essence, Aix-Marseille School of Economics recognizes the multifaceted advantages of international experiences for students.

Best regards,

Karine Gente

Professor of Economics Vice Dean International Relations

WHAT IS A DOUBLE DEGREE?

A Double Degree is a distinctive dual program that offers you the opportunity to:

- Study at two prestigious universities,
- Obtain two diplomas,
- Cultivate a unique differentiator for your CV,
- Spend the first academic year abroad and the second year at AMSE,
- Engage in programs taught exclusively in English.

WHY CHOOSE A DOUBLE DEGREE?

Opting for a Double Degree presents a multitude of advantages:

- Immerse yourself in new academic experiences and elevate your intellectual prowess,
- Expand your horizons through increased cultural and social exposure,
- Delve into a new business environment and broaden your understanding,
- Foster valuable connections worldwide for future professional collaborations,
- Spend a full academic year in an outstanding city and renowned school,
- Become an integral part of a diverse and inclusive international community,
- Equip yourself with the tools for a successful international career.

HOW DOES IT WORK?

- Duration: Four semesters (two years)
- Language: English
- Accreditation: 120 ECTS
- The M1 takes place in United Kingdom, Kent.
- The M2 takes place in France at AMSE, Aix-Marseille University.

FEES

- UK: The fees for the first year are paid to the University of Kent and are of £9,500.

- France: The fees for UE students are of 243 €. Aix-Marseille Université applies differentiated fees for non-EU students: check out the new policy <u>here.</u>

CURRICULUM

MASTER 1

| Courses | Credit amount | Term taught | Credit level |
|--|------------------|----------------|-----------------|
| Advanced Microeconomics of Consumers, Markets and Welfare | 15 | Autumn | 7 |
| International Economics | 15 | Spring | 7 |
| Advanced Macroeconomics | 15 | Autumn | 7 |
| Econometric Methods | 15 | Autumn | 7 |
| Labour Economics | 15 | Spring | 7 |
| Development Economics | 15 | Autumn | 7 |
| Research Skills for Economics Dissertation | 5 | Spring | 7 |
| PLUS the following extra-curricular compulsory module: | | - | - - |
| Economics Skills and Employability for MSc Programmes | 3 | Yearlong | 7 |
| PLUS you must take 30 credits from the following optional modules: | | <u>.</u> | |
| International Finance | 15 | Spring | 7 |
| Time Series Econometrics | 15 | Spring | 7 |
| Microeconometrics | 15 | Spring | 7 |
| Sustainable Economic Growth and Environmental Valuation | 15 | Spring | 7 |

MASTER 2, choose 1 track among 2

Track Econometrics Data Science (EDS)*

| Courses - Semester 3 | |
|--|------|
| | ECTS |
| UE 1. Machine Learning et Programmation I / Machine Learning and Programming I | 9 |
| Machine learning et statistical learning / Machine Learning and Statistical Learning | |
| Programmations / Programming | |
| Logiciels / Software | |
| UE 2. Econométrie I / Econometrics I | 12 |
| Méthodes de prévision / Predictive Methods | |
| Méthodes de réduction de l'information / Methods for Information Reduction | |
| Méthodes non paramétriques en économétrie / Non-parametrics Methods in Econometrics | |
| Séries temporelles / Time Series | |
| UE 3. Applications et projets I / Applications and Projects I | 8 |
| Utilisation de la science des données : limites et défis / Practicing data science in the real world: Limitations and Challenges | |
| Application: marketing quantitatif / Application: Quantitative Marketing | |
| Méthodologie des études économétriques et statistiques / Methods for work in econometrics and statistics | |
| UE 4. Préparation de l'insertion professionnelle / Preparation for entering the job market | 1 |
| Ateliers de professionnalisation / Professional training | |
| Courses - Semester 4 | ECTS |
| UE 5. Machine Learning et Programmation II / Machine Learning and Programming II | 6 |
| Machine learning avancé / Advanced Machine Learning | |
| Interprétabilité et la causalité en Machine Learning / Interpretability and Causality in Machine Learning | |
| UE 6. Econométrie II / Econometrics II | 3 |
| Modèles de transitions et de durées / Transition and Duration Models | |
| UE 7. Applications et projets II / Application and projects II | 3 |
| Hackathon et Certification / Hackathon and Certification | |
| UE 8. Stage de fin d'études / End-of-studies internship | 18 |
| Rapport de stage avec soutenance / Internship report with oral defense | |



Track Research in Econometrics*

| Courses - Semester 3 | ECTS |
|---|------|
| UE 1. Econométrie et mathématiques appliquées / Econometrics and applied mathematics | 8 |
| Econométrie approfondie / Advanced Econometrics | |
| Economie des réseaux / Network Economics | |
| Machine learning et Statistical learning / Machine Learning and Statistical Learning | |
| UE 2. Tronc commun en Economie / Core Classes in Economics | 6 |
| Macroéconomie approfondie / Advanced Macroeconomics | |
| Microéconomie approfondie / Advanced Microeconomics | |
| UE 3. Enseignements specialisés / Specialised Classes | 6 |
| Méthodes de réduction de l'information / Methods for information reduction | |
| Séries temporelles / Time Series | |
| UE 4. Analyse Econometrique et Financière (2 ECUE au choix) / Economic analysis (choose 2 among 4) | 8 |
| Méthodes de prévision / Predictive Methods | |
| Méthodes non paramétriques en économétrie / Non-parametrics Methods in Econometrics | |
| Finance d'entreprise approfondie / Advanced Corporate Finance | |
| Processus Stocastique et Application / Stocastic Processes and Application | |
| UE 5. Introduction à la recherche et professionalisation / Introduction to research and professionalisation | 2 |
| Questions de recherche / Research Questions | |
| Ateliers de professionnalisation / Professional training | |
| Courses - Semester 4 | ECTS |
| UE 6. Modelisation économétrique (2 ECUE au choix) / Econometric modelling (choose 2 among 3) | 8 |
| Modèles de transitions et de durées / Transition and duration models | |
| Interprétabilité et la causalité en Machine Learning / Interpretability and Causality in Machine Learning | |
| Econométrie theorique / Theoretical Econometrics | |
| UE 7. Méthodologie et mémoire de recherche / Methodology and research thesis | 22 |
| Méthodologie de la recherche / Research methodology | |
| Mémoire de recherche ou stage de fin d'études, et soutenance / Research thesis or internship report, and oral defence | |



CONTACTS

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